

# SCALABLE ULTRA LIGHTWEIGHT COMPUTING THREADS

## ABSTRACT OF THE DISCLOSURE

A computer thread utilizes an auxiliary stack resource to execute program code function calls requiring substantial stack memory resources. In a wrapper embodiment, portions of the program code having function calls requiring substantial stack resources  
5 are wrapped in a wrapper that calls an auxiliary stack resource for executing the function call and returns the auxiliary stack resource when the function call is completed. In one embodiment, the stack memory allocated to the thread is selected to accommodate a first class of function calls requiring comparatively low amounts of stack memory and the  
10 auxiliary stack resource is called to accommodate the requirements of a second class of function calls requiring comparatively large amounts of stack memory.